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HOUSEKEEPERS' CHAT

Friday, April 8, 1938

(FOR BROADCAST USE ONLY)

Subject: "SPONGE CAKES--YELLOW AND WHITE". Information from the Bureau of Home Economics, U. S. Department of Agriculture.

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Today my topic has a color scheme--a regular spring color scheme of yellow and white. I'm bringing you some tips for making sponge cakes -- for plain sponge cakes as golden as the dandelions that pop up overnight on the lawn -- for sunshine cakes that match the pale yellow of jonquils-- and for angel foods, fluffy and white as spring snowballs.

These cakes make ideal desserts for springtime meals. There is something about their soft, airy texture that tempts even the most jaded appetites. And a piece of fresh angel food or sponge cake is perfect to serve with a dish of the bright red strawberries coming to market now.

But there is another reason -- more practical than either of these -- for making spongecakes most often at this time of year. In the spring, eggs are most abundant and least expensive. And eggs are the chief ingredient in any sponge cake.

Eggs give to sponge cakes their color. By varying the proportion of whites and yolks we may get a cake that's pure white -- or one that's a delicate yellow -- or a deep gold. Eggs also supply the liquid in sponge cakes.

But most important of all, eggs serve as a means of adding leavening to these cakes. The air we beat into the whites causes the whole cake to rise and become light -- gives it that special texture that delights us. This method of leavening with air also presents some special problems in mixing of the cake.

There are two general problems in making a sponge cake. First, you have to get the air into the mixture -- and next you have to keep it there until all the ingredients are mixed and the cake is finally baked.

So, to get the air into the mixture. In the very first place, measure the eggs carefully. Measure them by quantity, not by number. Eggs vary a lot in size, but a cupful is always a cupful.

Before you start to beat the eggs, see that they are at room temperature. If you use them just as soon as you take them out of the refrigerator the beating will take a long time. But eggs at room temperature beat quickly. And they beat to a greater volume than they do when they are cold.

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Make sure before you start beating that there isn't any fat in the whites. Oil on the egg beater or a stray bit of yolk in the whites --- anything with fat in it will keep the whites from beating as stiff as you want them.

In beating eggs it also makes a difference at just what time you put in the salt and cream of tartar. Both of these help to keep the egg whites stable --- from going back to their natural liquid state as they stand. Experiments show that you get the best results when salt goes in right at the start of the beating.

Then, when the eggs are beaten up frothy, put in cream of tartar. After this, beat the eggs until they form peaks when you take the beater out of them. The foam is glossy and moist. This is the time to stop beating. You have enough air to leaven the cake and further beating will make the grain of the cake coarse.

So much for getting the air into the mixture. Now for keeping it there. Do all the rest of the mixing with a gentle, folding motion. And do it quickly so that the air won't have time to escape before it does its work in making the cake light.

After the egg whites get to the right stage of stiffness, fold in half of the sugar -- gradually of course. Folding in this sugar helps to keep air from escaping during the rest of the mixing. In angel food cakes the other half of the sugar is folded in with the flour. But in plain sponge and sunshine cake the other half of the sugar goes in with the beaten yolks.

In these yellow cakes the yolk-and-sugar mixture is folded into the white-and-sugar mixture. Cooks find that by having the yolk mixture on top during folding, air that escapes from the whites goes into the thicker yolk mixture and is saved for the cake.

Baking temperature also plays an important part in keeping air in the cake. The baking temperature for all sponge cakes is low -- about 325 degrees Fahrenheit. The temperature is low for the same reason that it is in other egg dishes. Egg protein "sets" at a low temperature -- and at high temperatures it shrinks and becomes tough.

A slow oven gives the air in sponge cakes a chance to expand and lighten the cake before the eggs cause it to set and give it a shape. The inside of the cake gets done and the outside does not shrink or become tough.

Now for a short backward glance over the main points in leavening sponge cakes. Have the eggs at room temperature before beating them. See that no fat gets into the whites. Beat them until they form little peaks but are still moist and glossy before adding any of the other ingredients. Combine all ingredients with a gentle, folding motion. And finally, bake at a low temperature.

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